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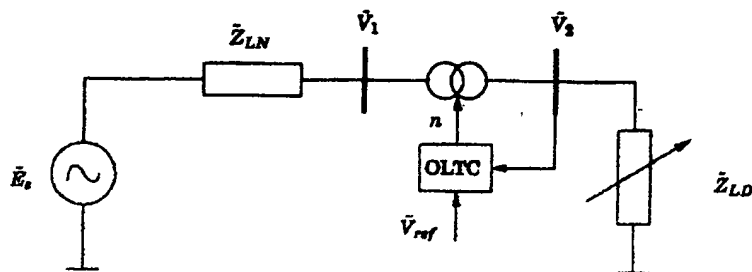
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(54) Title: POWER SYSTEM



Two-node system with generator, transmission line, transformer and load.

(57) Abstract: The present invention relates to voltage stabilization of electrical power networks, and in particular to a method for voltage stabilization of an electrical power network system comprising a producing power network system side and a consuming power network side to maintain voltage, wherein the power transfer  $Y_{LD}$ , wherein  $Y_{LD}$  is power load impedance, is dynamically maintained below the loci for maximum power transfer,  $n^2 Y_{LD} Z_{LN} = 1$ , wherein  $Y_{LD}$  is power load impedance,  $Z_{LN}$  is transmission line impedance and  $n$  is transformer ratio, preferably  $Y_{LD}$  is maintained at a stable equilibrium.

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